

A B S T R A C T

ROTOR RECENTERING AFTER DECOUPLING

The invention relates to a recentering device for a
5 rotor shaft (1) for recentering a rotor shaft relative to
the axis X of a stator structure (3) in the event of
decoupling caused by excessive imbalance, said shaft, in
normal operating conditions, lying on the axis X and
being radially supported by a bearing support (5) that is
10 disposed in a bore of axis X in said stator structure
(3), said bearing support (5) having an outside diameter
that is smaller than the diameter of said bore, in order
to enable said bearing support to orbit about the axis X
in the event of decoupling, said bearing support (5)
15 being connected to the stator structure (3) by radially
fusible elements (6), said device comprising means for
recentering the bearing support after decoupling, said
recentering device being characterized by the fact that
the recentering means for recentering the bearing support
20 (5) comprise means (10) for generating a movement in
precession P of said bearing support (5) in the direction
opposite to the direction of its orbits after decoupling,
and a plurality of devices (20) for decreasing the
clearance available to said bearing support (5) relative
25 to the axis X, said devices for decreasing clearance
being regularly distributed around the axes (X, 11) of
the two parts constituted by the stator structure (3) and
the bearing support (5), and each part includes a first
ramp (21) that is provided on one of said two parts and a
30 protuberance (22) provided on the other of said two
parts, said protuberance (22) being, in normal operating
conditions, radially spaced apart from said first ramp
(21) and capable of coming into contact with said first
ramp during the movement in precession P of said bearing
35 support (5).